

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Sergey IOFFE

Application No.: 10/734,258

Confirmation No.: 1477

Filed: December 15, 2003

Art Unit: 2609

For: METHOD AND APPARATUS FOR OBJECT
RECOGNITION USING PROBABILITY
MODELS

Examiner: A. Abdi

INFORMATION DISCLOSURE STATEMENT
(SUBMISSION AFTER FILING OF AN APPLICATION BUT BEFORE FINAL
REJECTION OR NOTICE OF ALLOWANCE OR CONCURRENTLY WITH A RULE
1.114 RCE APPLICATION)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications, or other information submitted for consideration by the Office are listed on the PTO-SB08(s), attached hereto.

II. COPIES

- ☒ a. Copies of cited U.S. patents and patent application publications are not included.
Copies of foreign patent documents and non-patent literature are included.

☐ b. Some or all of the documents listed on the PTO-SB08 are not enclosed because they were cited in the International Search Report and copies should already be in the PTO file. If copies are needed, please contact the undersigned.

☐ c. REFERENCES PREVIOUSLY CITED OR SUBMITTED - Pursuant to 37 C.F.R. §1.98(d), consideration of information listed on the PTO-SB08 form(s) is requested since any patents, publications, or other information which are listed on the PTO-SB08 form(s) but for which copies are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

U.S. Appl. No(s) and U.S. Filing Date

III. CONCISE EXPLANATION OF THE RELEVANCE

(check at least one box)

☒ a. DOCUMENTS IN THE ENGLISH LANGUAGE - The patents, publications, or other information listed on the attached PTO SB08 are in the English language and therefore, do not require a statement of relevancy.

☐ b. DOCUMENTS NOT IN THE ENGLISH LANGUAGE - A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

☐ c. ENGLISH LANGUAGE SEARCH REPORT - An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(III)(A)(3).

☐ d. OTHER - The following additional information is provided for the Examiner's consideration.

IV. FEES (check one box)

☐ a. This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

☐ b. This Information Disclosure Statement is being filed concurrent with the filing of a continuation-in-part, continuation, or divisional patent application; therefore, no fee is required.

☐ c. This Information Disclosure Statement is being filed within three months of the filing date of a national application (37 C.F.R. § 1.97(b)(1)). No fee or statement is required.
(This section is not to be used with RCE's.)

☐ d. This Information Disclosure Statement is being filed within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or statement is required.

☐ e. This Information Disclosure Statement is being filed concurrently with the filing of a Request for Continued Examination under § 1.114 (37 C.F.R. § 1.97(b)(4)). No fee or statement is required.

☐ f. This Information Disclosure Statement is being filed before the mailing date of a first Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or statement is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the statement under 37 C.F.R. § 1.97(e) below, or, if no statement has been made, charge our deposit account for the fee as required by 37 C.F.R. § 1.17(p).

☒ g. This Information Disclosure Statement is being filed before the mailing date of a Final Office Action under 37 C.F.R. § 1.113 (See 37 C.F.R. § 1.97(c)(1)) or before the mailing date of a Notice of Allowance under 37 C.F.R. § 1.311 (See 37 C.F.R. § 1.97(c)(2)).

☒ No statement; therefore, a fee as required by 37 C.F.R. § 1.17(p) is attached.
or

☐ See the statement below. No fee is required.

V. STATEMENT UNDER 37 C.F.R. § 1.97(e)

(check only one box)

The undersigned hereby states that:

☐ a. Each item of information contained in the IDS was first cited in any communication from a foreign Patent Office in a counterpart foreign application not more than 30 days prior to the filing of this IDS; or

☐ b. Each item of information contained in the IDS was first cited in any communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS; or

☐ c. No item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the IDS.

☐ d. Some of the items of information were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was first cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application and, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement.

VI. PAYMENT OF FEES (check one box)

☒ The required fee is listed on the attached Fee Transmittal.


☐ No fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 02-2448.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Dated: July 31, 2007

Respectfully submitted,


By _____
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Attachment(s):

- ☒ PTO/SB/08
- ☒ Document(s)
- ☐ Foreign Search Report(s)
- ☐ Fee
- ☐ Other:

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|---|---|----|--------------------------|------------------------|------------|
| Substitute for form 1449/PTO | | | Complete if Known | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | Application Number | 10/734,258-Conf. #1477 | |
| | | | Filing Date | December 15, 2003 | |
| | | | First Named Inventor | Sergey IOFFE | |
| | | | Art Unit | 2609 | |
| | | | Examiner Name | A. Abdi | |
| Sheet | 1 | of | 2 | Attorney Docket Number | 0879-0434P |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|-----------------------|---|--------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Document Number Number-Kind Code ² (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
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| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|-----------------------|--|--------------------------------|--|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov, or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

| NON PATENT LITERATURE DOCUMENTS | | | | |
|---------------------------------|-----------------------|---|----------------|--|
| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issu(e) number(s), publisher, city and/or country where published. | T ² | |
| | CA | Bianz et al., 2003, "Face Recognition Based on Fitting a 3D Morphable Model" <i>IEEE Trans. on Pattern Analysis & Machine Intelligence</i> 25(9): 1063-1074. | | |
| | CB | Chen et al., 2000, "In Search of Illumination Invariants" <i>Proc. Conf. CVPR</i> | | |
| | CC | Collins et al., 2000, "Logistic Regression, Adaboost and Bregman Distances", <i>Computational Learning Theory</i> , pgs. 158-169. | | |
| | CD | Cootes et al., 1998, "Active Appearance Models", <i>Lecture Notes in Computer Science</i> 1407:484. | | |
| | CE | Cootes et al., 2000, "View-Based Active Appearance Models" <i>Proc. Intl. Conf. Automatic Face & Gesture Recognition</i> , pgs. 227-232. | | |
| | CF | Culă et al., 2001, "Compact Representation of Bidirectional Texture Functions" <i>Proc. Computer Vision & Pattern Recognition</i> pgs. 1041-1047. | | |
| | CG | Freund et al., 1998, "Experiments with a New Boosting Algorithm", <i>Intl. Conf. on Machine Learning</i> , pgs. 148-156. | | |
| | CH | Georghiades et al., 2001, "From Few to Many: Illumination Cone Models for Face Recognition under Variable Lighting and Pose" <i>IEEE Trans. Pattern Analysis & Machine Intelligence</i> 23(6): | | |
| | CI | Gross et al., 2002, "Eigen Light-Fields and Face Recognition Across Pose" <i>Proc. Intl. Conf. Automatic Face & Gesture Recognition</i> | | |
| | CJ | Ioffe, S., 2003, "Red Eye Detection with Machine Learning" <i>Intl. Conf. on Image Processing</i> | | |
| | CK | Julesz, B., 1981, "Textons, the Elements of Texture Perception, and Their Interactions", <i>Nature</i> 290(5802) 91-97 (March). | | |
| | CL | Leung et al., 2001, "Representing and Recognizing the Visual Appearance of Materials Using Three-Dimensional Textons", <i>Int. J. Computer Vision</i> 43(1):29-44. | | |
| | CM | Murase et al., 1995, "Visual Learning and Recognition of 3-D Object from Appearance", <i>Intl. J. on Computer Vision</i> 14(1):05-24. | | |
| | CN | Pentland et al., 1994, "View-Based and Modular Eigenspaces for Face Recognition", <i>Proc. of IEEE Conf. on Computer Vision & Pattern Recognition (CVPR '94)</i> , Seattle WA (June). | | |

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|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|

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| | | Filing Date | December 15, 2003 |
| | | First Named Inventor | Sergey IOFFE |
| | | Art Unit | 2609 |
| | | Examiner Name | A. Abdi |
| Sheet | 2 | of | 2 |
| | | Attorney Docket Number | 0879-0434P |

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|----|--|--|
| CO | Phillips et al., 1998, "The Feret Database and Evaluation Procedure for Face-Recognition Algorithms", <i>Image & Vision Computing</i> 16(5) :295-306. | |
| CP | Phillips et al., 2002, "Face Recognition Vendor Test 2002. Technical Report", <i>NIST</i> . | |
| CQ | Schneiderman et al., 2000, "A Statistical Method for 3D Object Detection Applied to Faces and Cars", <i>IEEE Conf. on Computer Vision & Pattern Recognition</i> pgs. 746-751. | |
| CR | Tenenbaum et al., 2000, "Separating Style and Content with Bilinear Models", <i>Neural Computation</i> 12(6) :1247-1283. | |
| CS | Varma et al., 2002, "Classifying Images of Materials: Achieving Viewpoint and Illumination Independence" <i>Proc. Euro. conf. Computer Vision</i> pgs. 255-271. | |
| CT | Vetter et al., 1997, "Linear Object Classes and Image Synthesis from a Single Example Image", <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> 19(7) :733-742. | |
| CU | Wiskott et al., 1997, "Face Recognition by Elastic Bunch Graph Matching", <i>PAMI</i> 19(7) :775-779. | |
| CV | | |
| CW | | |
| CX | | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). *Applicant is to place a check mark here if English language Translation is attached

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|--------------------|--|-----------------|--|
| Examiner Signature | | Date Considered | |
|--------------------|--|-----------------|--|